



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/768,072 | 01/23/2001 | Liam B. Quinn | / M-9137 US | 2497 |

7590 10/09/2003

David L. Combs
Haynes and Boone, LLP
901 Main Street
Suite 3100
Dallas, TX 75202-3789

EXAMINER

PAN, YUWEN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2682

DATE MAILED: 10/09/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

7

Office Action Summary

Application No.

09/768,072

Applicant(s)

QUINN ET AL.

Examiner

Yuwen Pan

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 12 and 13 are objected to because of the following informalities: both claims 12 and 13 should be dependent claims of 11 instead of 7. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Vaisanen et al (US006560443B1).

With respect to claim 1, Vaisanen discloses a portable computing system with selectable transceiver switching (see column 1 and line 8-14) comprising:

A set of one or more transceivers, each of the transceivers with a unique communication protocol (see column 3 and line 61-column 4 and line 29),

A switch capable of differentiating communication signals and determining and choosing an appropriate transceiver from the set of transceivers to communicate for the computing system (see figure 1, column 6 and lines 36-53); and

A multi-band antenna capable of receiving and transmitting varying frequency signals to the chosen transceiver (see column 6 and lines 54-65).

Art Unit: 2682

With respect to claims 8-10, Vaisanen doesn't explicitly disclose selection of a transceiver is performed by a software driver with a higher level protocol stack and the software driver is instructed by a set of software application of the portable computer system. However, it is inherent that a switching functionality must be programmed within a chip or a processor, viz. by creating a user interface, the software, to further monitor and control the selection of multi-mode.

With respect to claim 11, Vaisanen further discloses the set of transceiver and the switch are integrated into a circuit card (see figure 4 and column 8 and lines 38-60).

4. Claims 14,15,16-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Dvorkin et al (US006249686B1).

With respect to claims 14 and 15, Dvorkin discloses a method of switching between a set of one or more transceivers within a portable computing system (see column 1 and lines 7-20) comprising:

Looking up in a state table corresponding power and frequency values (see column 1 and line 64-column 2 and line 15)

Comparing the characteristic of a signal received signal to the corresponding power and frequency value, and

Selecting a transceiver board capable of processing the received signal (see column 2 and lines 1-26).

It is inherent that the frequency and power of transmitting signal would be adjusted to corresponding receiving signal such that two-way communication is completed within in the same mode (see column 2 and line 41-47).

With respect to claims 16-21, Dvorkin doesn't explicitly disclose selection of a transceiver is performed by a software driver with a higher level protocol stack and the software driver is instructed by a set of software application of the portable computer system. However, it is inherent that a switching functionality must be programmed within a chip or a processor, viz. by creating a user interface, the software, to further monitor and control the selection of multi-mode.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaisanen et al (US006560443B1).

Vaisanen doesn't disclose that the switch is a zener diode or a current limiter device that differentiates upon power transmission. The examiner takes "Office Notice" that it is notoriously well known in the art to utilize a zener diode as a switch, in order to activate or deactivate a transmit mode.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to utilize a zener diode as a switch such that a transmit mode would be selected or deselected based on the input voltage.

Art Unit: 2682

7. Claims 3,5-7,12,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaisanen et al (US006560443B1) in view of Dvorkin et al (US006249686B1).

With respect to claim 3, Vaisanen et al doesn't teach an active power sensor device. Dvorkin discloses an active power sensor device (see figure 1 and item 78, column 2 and lines 33-47). It would have been obvious to one ordinary skill in the art at the time the invention was made to enclose the active power sensor device such that adequate signal strength would be implemented.

With respect to claims 5-7, Dvorkin further discloses a lookup table that associated transmission power with each of the transceivers, whereby the switch selects a transceiver from the set of transceivers when a certain power state in the lookup table is detected and the switch selects a transceiver based on a transmitted or received power (see column 2 and lines 1-47).

With respect to claims 12 and 13, Vaisanen further discloses the circuit card connects to a system board of the portable computer system and the circuit card is a mini PCI card (see column 5 and lines 35-55).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 703-305-7372. The examiner can normally be reached on 8-5 M-F.

Art Unit: 2682

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Yuwen Pan
September 30, 2003


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600
[0] 6 [03]